



Department of Permitting Services

Division of Building Construction

255 Rockville Pike, 2nd Floor, Rockville, Maryland 20850

Montgomery County In-Building Signal Amplification System Standard

Effective April 1, 2005, Montgomery County adopted regulations to require in-building signal amplification systems in certain buildings. The regulation was in form of an amendment to the 2003 International Building Code and is as follows:

SECTION 3110 IN-BUILDING SIGNAL AMPLIFICATION SYSTEM

Section 3110.1 General. The provisions of this Section shall apply to all newly constructed below ground floors of a building, all floors in buildings greater than 25000 ft² per floor, and to all floors of buildings greater than 3 stories in height of Type I and II constructions.

Exception: The requirements of this section shall not apply to areas within an individual dwelling unit.

Section 3110.2 Where Required. Every floor area in a building or structures which can not achieve the **required level of radio coverage as established by Montgomery County Department of Technology Services (DTS)** shall be provided with in-building signal amplification system.

Section 3110.3 Inspection and Testing. Radio coverage and in-building signal amplification systems must be tested, and inspected by approved individuals. The results of the testing and inspection shall be certified to the code official prior to issuance of an occupancy permit

REQUIRED LEVEL OF SIGNAL COVERAGE AS ESTABLISHED BY DTS

- Signal measurement is required to be -95dbm or above at a given point;
- Entire building is 95% or above covered (including all underground levels, basement, elevators, stairways, etc) at 95% of the time;
- In-building signal amplification system is required to provide coverage at Delivered Audio Quality (DAQ) 3.4 level or above. DAQ 3.4 is defined as "speech understandable without repetition. Some noise/distortion present."
- Measurements shall be performed using the Montgomery County Frequency Chart.

Additional Information:

Prior to issuance of an occupancy certificate, a registered design professional must certify that the building achieves the required level of radio coverage as established by DTS. This certificate must be presented to the building official upon request and must be presented in the form established herein.

Please note it is building owner's responsibility to hire a professional consultant to evaluate and test the required level of coverage in the building and to design and install (if required) the in-building signal amplification system.

Questions:

For questions regarding in-building signal amplification system standard or signal coverage you may contact Department of Technology Services via phone at [240-777-5203](tel:240-777-5203) or by email at BDASstandardQuestions@montgomerycountymd.gov.

Montgomery County Frequency Chart

CHANNEL No.	Base Rx	Base Tx	CHANNEL TYPE
1	823.9375MHz	868.9375MHz	CONTROL CHANNEL
2	823.8875MHz	868.8875MHz	CONTROL CHANNEL
3	823.8625MHz	868.8625MHz	CONTROL CHANNEL
4	823.6875MHz	868.6875MHz	CONTROL CHANNEL
5	823.6375MHz	868.6375MHz	VOICE
6	823.6125MHz	868.6125MHz	VOICE
7	823.4375MHz	868.4375MHz	VOICE
8	823.3875MHz	868.3875MHz	VOICE
9	823.3625MHz	868.3625MHz	VOICE
10	823.2750MHz	868.2750MHz	VOICE
11	823.1625MHz	868.1625MHz	VOICE
12	823.1125MHz	868.1125MHz	VOICE
13	822.9125MHz	867.9125MHz	VOICE
14	822.8875MHz	867.8875MHz	VOICE
15	822.8375MHz	867.8375MHz	VOICE
16	821.6500MHz	866.6500MHz	VOICE
17	821.4875MHz	866.4875MHz	VOICE
18	821.3375MHz	866.3375MHz	VOICE
19	821.2750MHz	866.2750MHz	VOICE
20	821.2125MHz	866.2125MHz	VOICE

CERTIFICATE OF RADIO COVERAGE COMPLIANCE

Project Name: _____

Project Address: _____

Building Permit Number: (A/P): _____

Design Professional Engineer of Record: _____

I have tested the building for radio coverage level(s) in accordance with the Montgomery County Department of Technology Services (DTS) standard. To the best of my information, knowledge and belief, the radio coverage levels for this project is in accordance with the specifications and is in compliance with DTS standards and regulations.

Respectfully submitted,

Signature of Design Professional Engineer of Record

Date

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